

# The Builder.

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## SOMETIMES

we have been asked what we strictly mean by the term Freemasonry, so often adopted by us, and apparently in a sense so very different from that in which the word is most generally used at the present day; and our inquirers seem unable to divest themselves of the ideas of certain frolicking, dressed-up, well-feasting, good-fellowship-lovers, charitable to their brethren, stately enough at the festive board, and who have found out the

secret of knowing nothing whatever concerning stone-masonry or of any other of the arts by which buildings can be plotted, reared, and made to endure.

Our answer is, Freemasonry is what it always used to be, and what it can alone truly be,—the sublimest science applied to architectural design and practical building.

The decayed remnant of the Freemasons have traditions that Moses, Solomon, Wykham, and many patriarchs who were great builders, were Freemasons; this may be or may not be true; and till it be proved that those characters who are mentioned in the Bible, without any such information relative to them, were so, we must take as entirely rabbinical all such assertions; and we think those clergymen, who knowing how cautious it is necessary for a divine to be in matters of belief or of sacred history, must be gifted with strange consciences or extraordinary mental perceptions to give into assertions so unproved, and of which men can hardly exhibit a belief, without falling into condemnation for heresy; we do not wonder, therefore, that the Pope should have thus so condemned the modern so-called Freemasonry, since the whole of Catholicism contains in its dogmas nothing so hazardous.

It is reported that Sir Christopher Wren reinstated Freemasonry in England; and well he might; for since the fall of the old Freemasonry, no other man has existed so intimately acquainted with the subject; but how would that great man be mortified to find the fall of his darling art, as it is at present found in England! Freemasonry has been said to flourish in the nineteenth century, and yet, through the decline of the true art, buildings have become unsound, tearing themselves to pieces by their own gravitation; the engineers in their works are restoring the art partially, but with little of the beauty and economy of the old masons; few of their works approach the grace and wise thriftiness of the old examples of the middle ages; there are, it is true, many industrious persons at work, measuring, delineating, and collecting examples, so that by-and-by our reasoning powers will be able to collate them and to ascertain motives, and thence to design in the true spirit of Freemasonry; there is no mere surface-work

in masonry, all is muscle and bone; there is no mere lumber; all the material of a masonic building is dutiful in its station; tons of weight are not raised to do mischief, and tons more of other weight to restrain that mischief, and so leave no result but cost and foundation-burthen; but dynamics, and all the higher sciences, were called into action, and in proportion as these excel the ancient times in many arts and sciences, just so should modern excel ancient Freemasonry. Some minds are at work, even in the present immature condition of our knowledge of the structure of ancient buildings, to re-arrange and render again active ancient architectural science; but this must of necessity be the work of years, for little can at present be done beyond such collection and collation: no one has hitherto published so apparently simple a piece of information as a representation of a prism composed of a succession of such materials as will have equal capability throughout of resisting crushing, the densest being lowermost, and those least capable of bearing being uppermost: nor has any one shown the proper form of a body composed all of the same kind of materials, which shall have its particles equally crushed throughout: very slender information exists as to the alterations in the capabilities of different kinds of materials when increased in bulk, whether laterally or vertically; this information settled and made notorious, will form the ground-work of restored Freemasonry. After that, a knowledge of dynamics will work the greater part of the rest, a principal component part of which must of necessity be a due acquaintance with the catenary, either approaching purity or in a broken state, whether by the effect of bosses, pinnacles, or any other expedients or devices, or from any unavoidable circumstance.

The climax of architectural knowledge will be, the so ordering a building, that there will be such a total discharge of lumber from it, that its curves, arches, vaultings, roofings, piers, columns, buttresses, and every other part of it will remain as nearly as possible where they are designed to be, and where actually placed,—which cannot be the case unless the whole building, if only strung together and inverted “bodily,” would retain every position, form, and curvature, as designed—the mere circumstance of inversion excepted: many of these things can be proved by the bones of animals: the bones of four ox tails strung together and inverted will prove a vast deal relative to the forms, and the quantity of materials proper for groined vaults, and will shew the difference of curvature necessary in proportion to the size of the central boss: if that boss be heavy, which may be shewn by tying the tails together at some considerable distance up from their small extremities, the extraneous weight thereby cut off, will occasion the curves to be straighter than if only a small boss were used, this shews the theory of steeples of four flying buttresses, like those of Newcastle-on-Tyne, and Saint Dunstan, London; the former of these has less superstructure, and buttresses very properly more embowed; the London example, though in minute detail less elegant than the other, is of much finer outline and general form, having a loftier superstructure, its four flying buttresses are consequently made much less embowed. If the four buttresses of the Newcastle example had been less bowed, the structure would have been out of balance, and they would consequently have fallen inwardly; if, on the contrary, the buttresses of Saint Dunstan’s steeple had been more embowed, the heavy superstructure would have sunk, because

the pressure would have fallen within the buttresses, and they would have consequently been forced more outwardly, till the whole would have fallen. These steeples, which have been supposed to have much mystery involved in their construction, are nothing but the four angle-ribs of the simplest description of groined vault, designed in such form as to balance properly with a large boss; they are simply vaults discharged of the cuticle lumber-work, which, in ordinary cases, lies between their angle-ribs. The example of the ox-tail bones will also shew one fact, viz., that in proportion as the burthen to be commenced with is great or small, so must the summit of the arch commence large or small in bulk of section: so that, using the tails for a model, and pinching off by a ligature as much of the smaller parts of the tails as will represent the burthen to be supported; the remainder of the tails will shew the necessary commencing strength, and its proportion throughout the work from thence downwardly.

Eventually it will be found that a church should consist of a series of pyramids of equilibrated pressure, disposed at uniform distances; these will be split at certain points to form buttresses, columns, vaulting-ribs, and all the other parts of the fabric without the intervention of a single particle of any material other than that composing each such equilibrated pyramid of pressure; thus each particle of such fabric will be as safe from fracture as each other particle of it.

In the New Metropolitan Building-Act some approach has been made to this branch of Freemasonry, by the adoption of a system of progressive thickness in walls from their summits, downwardly. In a perfectly designed church, such a progression should go on from each summit-base to the foundation of the work, so that, beginning at the foundation, the bulk of the materials should scientifically diminish upwardly; and where flying-buttresses and vaultings commence, the same mass should be divided and proceed through the several vaulting ribs upwardly; and if any irregular extra thickness be required for any part, nature should be followed, who in such cases, in animal mechanism, always uses a material of a structure less dense, the aggregate strength of which is only suited, though of increased dimension, to the duty to be performed. Hence, in such cases, the Freemasons frequently used only chalk, tophus, or other light materials. In proportion as Freemasonry is restored, all the nonsense about roofs and construction which is being put forth in the saucy, ignorant pamphlets of the so-called Cambridge Camden Society, will be dissipated. There is not in existence, and never was, a perfect open tileless roof; science may make such a thing, but it never did yet. Nearly half of them destroy at least half the effective strength of their supporting walling, upon which they make war. For such a roof to maintain its due form, it must in design and model be inverted, as we before intimated, and the walls must be inverted too with it; the work will then assume, upon being erected, a state of permanent rest; but it will then be found that the walling has assumed a curved form; for want of this curved form the walls of all buildings with open roofs are invariably thrust over. In Westminster Hall, where the building is nearly literally all roof, the stumpy walls of enormous thickness, notwithstanding the enormous flying and perpendicular buttresses of the fabric, were greatly thrust over, which has been concealed by internal and external